



Promoting a better understanding of
Harmful Algal Blooms by way of
Volunteer Monitoring

Southeast Phytoplankton Monitoring Network

Partnering With:



Data Sheet:

- Fill out the date and time that sample was taken from the site.
- Record water temperature (must be measured at sampling site) and salinity (can record this in classroom). *Instructions for salinity and temperature are on another SEMPN document.*
- Indicate location and area of sampling site in case NOAA scientists need to monitor your site for further testing. Please include the name of the group at the bottom of the data sheet.
- After identifying what is in your sample, place a check next to that species on the species list for every time you see it. (**Teachers:** Remember to use the average of what each group of students observed to come up with the total class abundance ratio.)
- To determine abundance ratios: you will use a percentage of area covered by a group of Genus or species of plankton.
 - The area under your microscope cover slip is equal 100%.
 - If you divide the area of your microscope slide into 2 equal sections, then the area will be 50%. Divided into 4 sections, each area is equal to 25%, and so on, so forth.
 - Abundance Ratios are as follows:
 - Zero percent area covered equals **NONE**.
 - Equal to or less than 10% area covered is labeled **PRESENT**.
 - Greater than 10% or less than or equal to 40% is labeled **COMMON**.
 - Greater than 40% or less than or equal to 80% is labeled **ABUNDANT**.
 - Greater than 80% of area covered is labeled **BLOOM**.
 - Imagine what the total area of all the individuals of a Genus or species will take up. For example, 1 *Nitzschia* will take up less than 1% but more than 0% of the total area of the cover slip and therefore is labeled PRESENT. By the same token, because 100 *Nitzschia* are so small, the area that they take up is still less than 10% and will still get the label PRESENT.
 - *Rhizosolenia* is a much larger diatom than *Nitzschia* and 60 individuals of that Genus will cover an area greater than 10% and will get a label of COMMON.
 - If the number of species in your slide covers more than 50%, then it is labeled ABUNDANT.
 - If the number of species in your slide covers more than 80%, then it is a bloom and you need to contact SEMPN staff immediately to determine if further samples and/or research are needed.